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Medical Imagery

A massive cavitary lesion invading the chest wall

Description

A 39-year-old woman with a history of myelodysplastic syndrome presented to our hospital with pancytopenia and fever. She had undergone an allogeneic bone marrow transplantation 2 years before; therefore, combination antimicrobial therapy was initiated for her febrile neutropenia. Chest computed tomography revealed infiltrates in the right upper lobe (Figure 1A), and the patient subsequently complained of worsening chest pain. Sequential computed tomography images revealed the invasion of the lesion into her chest wall and the eventual formation of a cavity, with rib fractures (Figure 1B–F). The decision was made to

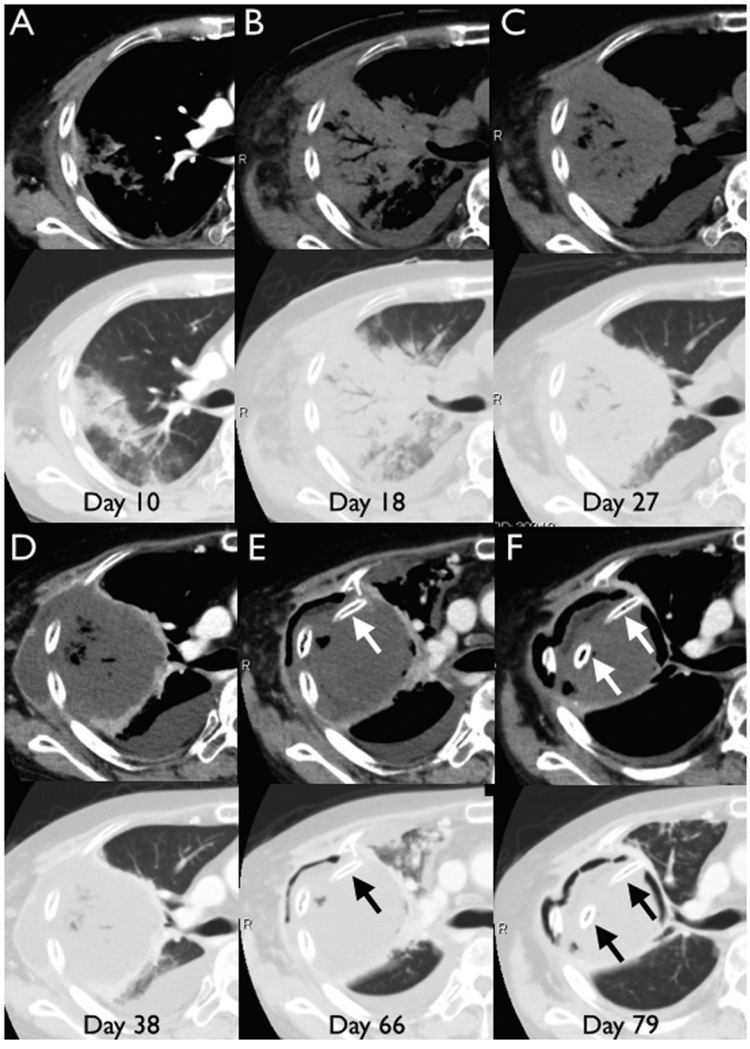

Figure 1. Chest computed tomography initially revealed infiltrates in the right upper lobe (A). The lesion subsequently invaded the chest wall (B, C) and eventually formed a cavity (D) with rib fractures (arrows) (E, F).

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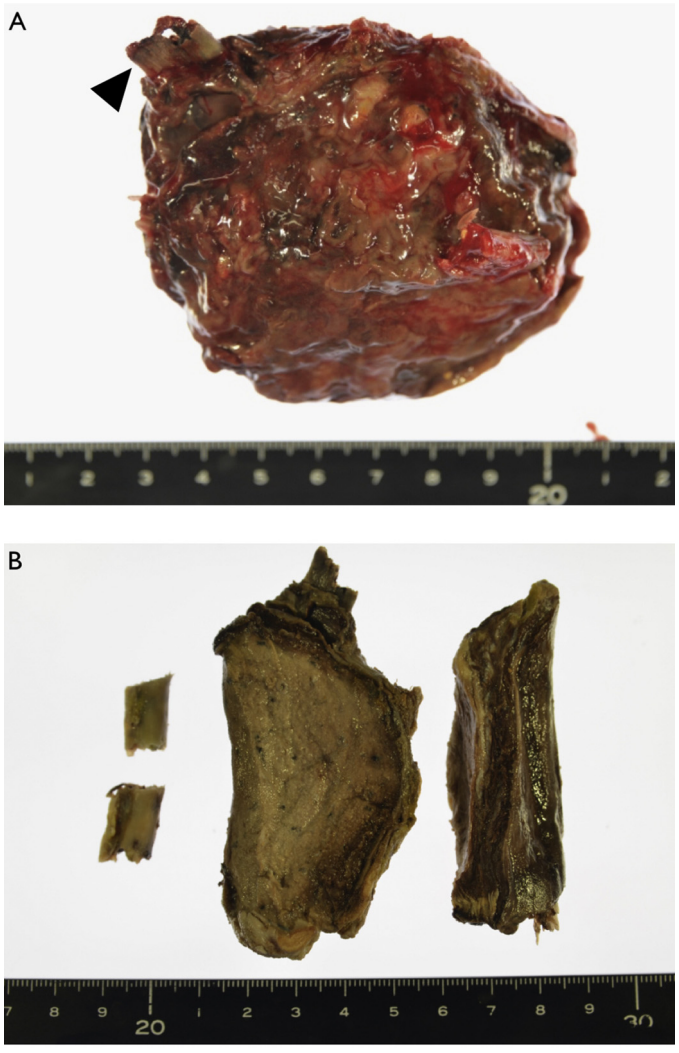

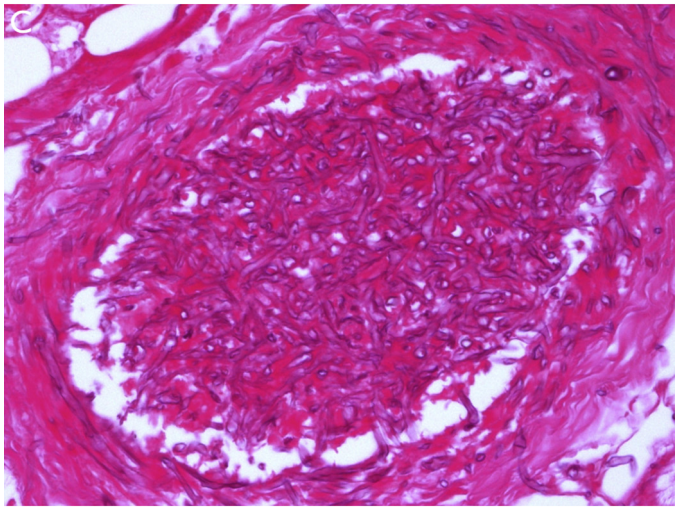

Figure 2. (A) Photograph of the resected specimen from the cavity showing necrotic tissues with a fractured rib (arrowhead). (B) Cross-sectional view of the fractured rib. (C) Blood vessels containing a conglomerate of filamentous fungi (×40; hematoxylin–eosin stain).

resect the right upper lobe and fractured ribs. The blood vessels in the resected necrotic tissue were filled with a conglomerate of filamentous fungi (Figure 2), which were subsequently identified as belonging to the *Rhizopus* genus using in situ hybridization of the 18s rRNA.

A few reports have described pulmonary mucormycosis invading the bronchial or chest walls.[1] However, in previous reports of similar cases, the differential diagnoses were tuberculosis,[2] Aspergillus,[3] Nocardia,[4] and Actinomyces,[5] while Rhizopus was involved in the present case. Pulmonary mucormycosis should be considered in cases with a massive cavitary lesion invading the chest wall, as early antifungal therapy along with surgical resection can improve the patient's prognosis.

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Conflict of interest: The authors declare that there are no conflicts of interest to disclose.

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Takanori Asakura[a,b,*]
Yohei Funatsu[a]
Takahiko Oyama[a]
Katsutaka Mineura[a]
Arafumi Maeshima[c]
Takashi Okabe[d]
Hironori Ueno[d]
Takahiro Yano[d]
Yoshitaka Oyamada[a]
Ryoichi Kato[a]

[a]*Department of Respiratory Medicine, National Hospital Organization Tokyo Medical Center, Meguro, Tokyo, Japan*
[b]*Department of Pulmonary Medicine, School of Medicine, Keio University, 35 Shinanomachi, Shinjuku, Tokyo 160-8582, Japan*
[c]*Department of Pathology, National Hospital Organization Tokyo Medical Center, Meguro, Tokyo, Japan*
[d]*Department of Hematology, National Hospital Organization Tokyo Medical Center, Meguro, Tokyo, Japan*

[*]Corresponding author. Tel.: +81-3-3353-1211; fax: +81-3-3353-2502